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1. *Suggestions and Plans for Psychopatic Wards, etc.*—Some suggestions, based mainly upon a visit to some of the more recently constructed German psychopathic wards and hospitals, notably the Psychiatric Clinic at Kiel, with a number of very instructive plans, by Mr. Montgomery, an architect.

2. *Syphilis of the Nervous System.*—A case, from the Maclean Hospital, of a man of forty years old, who showed an amnesic symptom-complex, with gradual dementia and certain focal manifestations, the latter being fairly well accounted for by the autopsy findings. The pathological changes consisted in meningeal thickening, arterial disease, neuroglia proliferation, cell degeneration and local gummatous deposits. The details of cell cannot be entered into here.

3. *A Medico-legal Case of Well Poisoning with a Plea for a Hospital Observation Law.*—An account of the case of a man accused of the above crime, who, only after repeated examination, was decided to be a defective and mentally irresponsible.

The difficulty of decision in such cases has led the author to make a plea for a law authorizing the commitment to a hospital for the insane of persons accused of crime, about whose mental condition there is a doubt, in case the medical examiners decide that a prolonged observation is necessary to resolve such doubt. Upon his initiative the Boston Society of Psychiatry and Neurology appointed a committee, who succeeded in securing in Massachusetts legislation authorizing the court when necessary to order such detention. A similar statute exists in Maine, Vermont and New Hampshire, and is found to work well.

4. *Blood Pressure in the Insane.*—The author has studied the blood pressure by means of a modified Riva-Rocci syhygmomanometer, in twenty-five insane women of various ages, and presenting various mental conditions, numerous observations being made. extending over periods of several months. He has not so far found this determination of much practical assistance from a diagnostic point of view, but thinks the subject worth more extended investigation. Upon his studies he bases the following conclusions: 1. The findings of other writers that blood pressure is increased in depressive states, and decreased in excited states, and that the motor condition has a greater influence on the blood pressure than does the mental condition have been confirmed. 2. "A moist skin has no special influence upon the blood pressure though active perspiration may." 3. There is no constant variation, as has been shown by Schaeffer and others.

5. *Scotch Lunacy System.*—Owen Copp outlines the general method and tendencies in the care of the insane, observed by the author during a recent visit to Scotland. The salient features of the Scotch system the author epitomizes as follows: 1. "The hospital idea embodied at present in the reception hospital, which, in urban localities, seems likely to expand

into the psychiatric clinic." 2. "The colony idea expressed at existing asylums in farmsteadings, industrial groups, home villas and outlying farms, and in the new colonies projected after the Alt-Scherbitz plan." 3. "Community care now facilitated by boarding in families and temporary treatment in unlicensed houses by a general practitioner."

6. *Astasia-Abasia Associated with Epilepsy.*—Description of a case showing the above symptom, together with certain other hysterical manifestations, and having besides from time to time undoubted attacks of grand mal.

7 *Colony Buildings for the Defective Classes.*—The colony plan may serve equally well for epileptics, the insane, the feeble minded, and for a proportion of the reformatory classes. Basing his opinion upon his experience at the Craig Colony for Epileptics the author makes the following suggestions: A large tract of land should be secured, an acre per patient is not too much. The buildings should be arranged so that starting out from the administration building, hospital, etc., the residences for the best patients come next, the intermediate class are placed further off, while farthest away are located the irresponsible, infirm and generally objectionable. He illustrates his meaning by a diagram of concentric circles—though he expressly states that the buildings are not of necessity to be built in concentric rings. The inner and smallest circle is to contain the office building, hospital, laboratory, chapel, laundry, schools, storehouse, industries, library and employment homes. In the next circle come the houses for the best class of patients (at Craig twenty per cent. of the total), each for from sixteen to eighteen patients, half of whom have single rooms. In the third circle are houses for twenty-eight to thirty persons, two to five in a room, the intermediate class (at Craig sixty per cent.), while the outer circle is for the bedridden, infirm and chronic insane, 125 to 150 to a house (at Craig twenty per cent.).

8. *Status Epilepticus*—(Concluded from Vol. 60, Nos. 2 and 4).—L. Pierce Clark and Thomas P. Prout base this clinico-pathological study on thirty eight patients with status, five cases of serial attacks ("état mal de passage"), and four cases of status equivalent. The authors at the start give the following definition: "Status epilepticus is the maximum development of epilepsy, in which one paroxysm follows another so closely that the coma and exhaustion are continuous between the seizures." Status is sooner or later accompanied by rise of temperature, and rate of pulse and respiration; in the great majority of cases the extent and character of this rise giving important prognostic indications. Status occurs mainly in connection with grand mal epilepsy, hence it is chiefly characterized by convulsions, either general or local, followed by exhaustion and coma, but the various epileptic equivalents occur. The spasm may be tonic or clonic, or of one form only. Status occurs mainly in "idiopathic" epilepsy, but is a notable ending in Jacksonian and symtomatic forms. The authors consider it the natural climax of all cases of epilepsy not carried off by some intercurrent disease. They cannot find that age, sex or menstruation exercise any special influence in its determination. As to time elapsing between the establishment of the fits and the first attack of status, an average in twenty-three cases was found to be twelve years. The epilepsy must become well established before status supervenes. The intervals between the attacks of status are very irregular. As a rule, the second or third period will prove fatal in "idiopathic" epilepsy, though the authors have seen cases surviving four, five and six attacks. The further short of typical grand mal attacks the individual seizures fall in severity, the less the gravity of the status. As a rule status is heralded by increased frequency of paroxysms, a history of serial attacks rising from five to fifteen, or twenty in twenty-four hours has been the rule. Serial periods of ten to twenty seizures, attended by slight rise of temperature with but little

prostration, have been called by Bourneville "état de mal passage." At the onset the grand mal attacks usually occur at intervals of a half hour to an hour. In partial epilepsy "the single seizure of the status holds to a distinct order of invasion as long as exhaustion is not extreme, and the definite order of muscular involvement is continued throughout the status." At first consciousness is regained between the seizures, but as they grow more frequent the patient becomes stuporous, then profoundly comatose. The temperature rise reaches in some cases 107° or 108° F., the pulse rate mounting to 160 to 200 per minute. At last the convulsions lessen in frequency, and the patient lies in the coma of collapse. He may die in the convulsion, but as a rule he passes a few hours in coma, which is either followed by death or gradually passes into stupor, then into mild delirium, which slowly proceeds to recovery, though if this is long delayed extensive sloughing about the nates takes place, and the patient dies. There may be from fifty to two hundred seizures a day, six of the authors' cases having been between 100 and 200. Partial attacks are much less serious, one of the cases having seventy-five in a day without much prostration, while another had 755 absences in twelve hours. As a general rule the convulsive stage lasts from eight or ten hours to three or four days. The stuporous and comatose stage is largely the product of the convulsive stage. It lasts for varying periods, in the majority of instances from two to nine days. The authors devote some space to the consideration of transitory hemiplegias and other paralyses following repeated seizures and status, which they regard as being due to exhaustion of the cerebral centers. The reflexes are lost in the comatose stage, and exaggerated after it, remaining so for weeks or months. Salivary secretion is arrested in the course of status, and the tongue, lips and cheeks become dry and fissured. There is gradually paralysis of the pharyngeal muscles, the throat becomes filled with mucus, and swallowing is impossible. Epistaxis and hemoptysis have been noted. The pupils are usually dilated, but may show various irregularities. Subconjunctival hemorrhages are frequent. The skin in the later stages is cold and clammy. It sometimes shows erythematous, urticarial or herpetic eruptions. Subcutaneous hemorrhages are frequent. Among trophic disorders the most remarkable are bed sores and loss of weight. The urine—which together with the feces is often voided involuntarily—may contain albumin, blood and casts. The sweat is very abundant, but detailed studies upon it and upon the blood seem to be wanting. The study of the fever, pulse and respiration curves gives important prognostic indications, their continued rise being a signum mali ominis. The authors enter into a discussion of the cause of the fever, which cannot be detailed here. The diagnosis of status depends chiefly upon the history of previous epilepsy, and in the absence of this may present some difficulty, though close attention to symptoms will, as a rule, point out the distinction between it and apoplectic and uremic states, etc. The prognosis of status, while very grave, is not necessarily hopeless, the mortality running from thirty-three to fifty per cent. Calculating this, however, upon the whole number of status periods, instead of upon the number of patients (which the authors think would be more rational), they find it fourteen per cent. only. The advance of the symptoms unmodified by treatment points to a fatal issue. Into the authors' discussion of the pathology of epilepsy in general it is impossible to follow here. The pathological findings, both gross and microscopical, are next considered, many of those reported being put aside as irrelevant. It is well known that in epileptics many abnormalities in skull, brain and membranes are found. These the authors are inclined to look upon as developmental defects, in which category they would also place the thymic hyperplasia, and evidences of lymphatic diathesis described by Ohlmacher. In their microscopical investigations they have proceeded upon what they consider an established fact, that epilepsy is a disease of the cortex, and have studied especially the cortical cells and the neuroglia. Seven cases of status were examined, and the findings compared with those in twelve other epileptics. The changes found affect chiefly the cells of the second, and to a less extent, those of the third layer of the cortex. They seem to begin in the nucleus and lead to disappearance of the nuclear membrane and the karyoplastic reticulum, favoring displacement of the nucleolus. The chromatic substance of the cell also disappears, and at length only a dimly outlined cell body remains, many neurones seeming to disappear. The cortex is invaded by leucocytes, and there is neuroglia proliferation. Considering the meaning of these changes the authors regard as characteristic the pre-eminent involvement of the nucleus, in which they think the formative power of the cell centers, and which is the essential element in chemical synthesis. They draw the following conclusions: 1. "If the especial involvement of any particular type of cell is indicative of the essentially sensory or motor character of epilepsy, it would seem that Prus was correct in concluding that epilepsy is essentially a sensory phenomenon, as the cells of the second layer and the third layer, in lesser degree, are especially involved." 2. "The essential lesion of epilepsy pertains to the nucleus of certain of the cortical cells, and is of such nature as to seriously jeopardize the cell for considerable periods and ultimately cause its destruction." 3. "The chromatolysis in epilepsy is a nutritional change, brought about by the nuclear toxemia, since the nucleus presides over the process of elimination, absorption and digestion in the cell unit." 4. "The rôle of the leucocyte in the cortex, after severe epileptic explosions, is most probably that of a phagocyte." 5. "The neuroglia overgrowth in epilepsy is one of its more remote sequences, and probably occurs in response to toxic irritation. The treatment of status must be largely prophylactic, though it cannot always be prevented. The tendency to serial attacks should be reduced by bromides. For incipent status the following is recommended:—

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| ℞—Tinct opii deodorat | m V |
| Potass brimid | gr. XXV |
| Chloral hydrat | gr. XX |
| Liq morphin sulph (U. S.) | dr. I |

Until this can take effect the convulsions should be controlled by chloroform. Venesection may have a place in the few plethoric cases, but as a rule it is best followed by saline injections. After status is well established chloral and bromide, by rectum, and morphia, hypodermically, may be called for. A number of other drugs are discussed, but the authors consider them of doubtful utility. Bromide of sodium in ten per cent. solution may be given hypodermically, but generally leads to abscess. The stuporous stage requires supportive treatment with special attention to nutrition and stimulation. Peptonized milk, with eggs and beef extract, should be given, and tube feeding may be required. That the patient needs plenty of water should not be forgotten, and enteroclysis, or hypodemoclysis, may be indicated. For the restlessness and sleeplessnes of the stage of delirium, the milder hypnotics will be, as a rule, found sufficient.

9. *Influence of Mode of Life Upon the Blood of the Inmates of a Hospital for the Insane.*—The author made blood counts and hemoglobin determinations in fifteen patients of each of the following classes: 1. The newly admitted. 2. Chronic patients remaining mostly indoors. 3. Chronic patients working out of doors. 4. Patients living in tents on special diet without medicinal treatment. In Class 1 the Hb. averaged 60-70 per cent., in Class 2, 50-70 per cent., in Class 3, 70-90 per cent., and in Class 4, 80-90 per cent. The number of red cells closely paralleled the Hb. His results with diagnoses of mental diseases and remarks are exhibited in tabular form.

ALLEN (Trenton.)